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## PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

1001.2240101

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on APRIL 20, 2009

Signature 

Typed or printed name THU H. LE-TO

Application Number

10/680,288

Filed

OCTOBER 8, 2003

First Named Inventor

TOBY FREYMAN

Art Unit

3734

Examiner

VI X. NGUYEN

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.


I am the

☐ applicant/inventor

☐ assignee of record of the entire interest.  
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
(Form PTO/SB/98)

☒ attorney or agent of record.  
Registration number 41376

☐ attorney or agent acting under 37 CFR 1.34.  
Registration number if acting under 37 CFR 1.34 \_\_\_\_\_

  
Signature

J. SCOT WICKHEM

Typed or printed name

612.677.9050

Telephone number

4-20-2009

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☐ \*Total of \_\_\_\_\_ forms are submitted

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**P A T E N T**

**UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	TOBY FREYMAN et al.	Confirmation No.:	4217
Serial No.:	10/680,288	Examiner:	Vi X. Nguyen
Filing Date:	OCTOBER 8, 2003	Group Art Unit:	3734
Docket No.:	1001.2240101	Customer No.:	28075
Title:	MEDICAL DEVICE GUIDANCE FROM AN ANATOMICAL REFERENCE		

**PRE-APPEAL CONFERENCE BRIEF**

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Thu H. Le-To

APRIL 20, 2009

Date

Dear Sir:

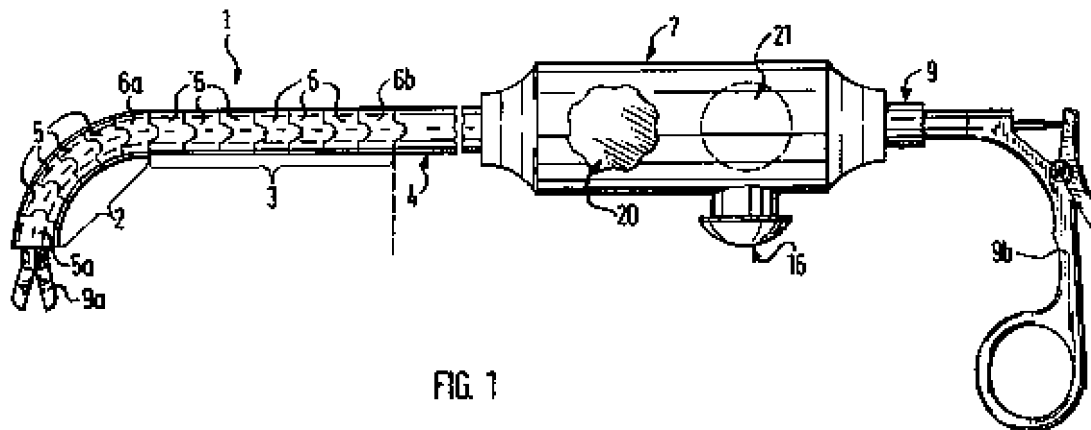
Appellants have carefully reviewed the Final Office Action of November 20, 2008 and the Advisory Action of February 13, 2009. Currently, claims 1-5, 22-31, 33 and 34 are pending and have been twice rejected. Appellants hereby request a pre-appeal conference and file this pre-appeal conference brief concurrently with a Notice of Appeal. Favorable consideration of the claims is respectfully requested.

Claims 1-2, 5, 24-31 and 33-34 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hecke (USPN 5,448,989) in view of Kittrell (USPN 5,693,043). Applicants respectfully appeal the rejection because the cited prior art references do not teach or suggest each and every element of the claimed invention, singly or when viewed together. As such, these claims are allowable over these references.

Claims 1-2, 5, 24-31 and 33-34 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hecke (USPN 5,448,989) in view of Kittrell (USPN 5,693,043).

Applicants respectfully traverse the rejection because the cited prior art references do not teach or suggest each and every element of the claimed invention.

Heckele is the primary reference, with Kittrell being cited merely to teach a radiopaque catheter. Heckele pertains to a medical instrument having a hollow shaft made from tubular segments, some of which are connected by hinge mechanisms and can accordingly bend to curve the shaft. Control wires (10, 11) are placed through the wall of the shaft to allow an operator to adjust the curvature of the shaft by adjusting a knob in the handle of the device, which pulls the control wire(s) on one side of the shaft to curve the shaft in that direction. Significantly for the purposes of this discussion, the control wires are completely concealed within the device, as shown in Figure 1 of Heckele:



Claim 1 of the application recites “a plurality of tube wall bending indicators located at least on or within the catheter wall at a reference portion of the catheter to become curved where the catheter passes through an anatomical reference when the distal end of the catheter is at a target site within the patient's body; wherein the plurality of tube wall bending indicators provide an indication of tube wall bending to indicate the orientation of the reference portion of the catheter relative to the anatomical reference.” One embodiment of these indicators can be best understood with reference to Figures 7A and 7B of the application, which are views of the proximal end of a shaft.

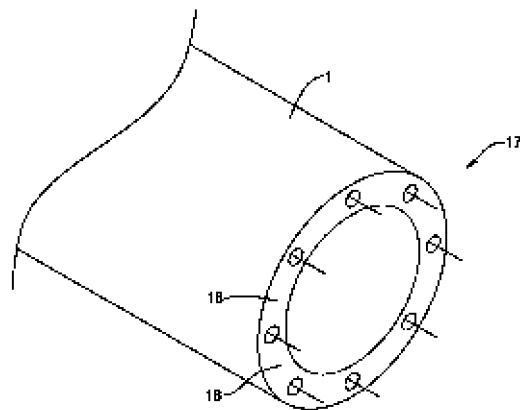


Figure 7A

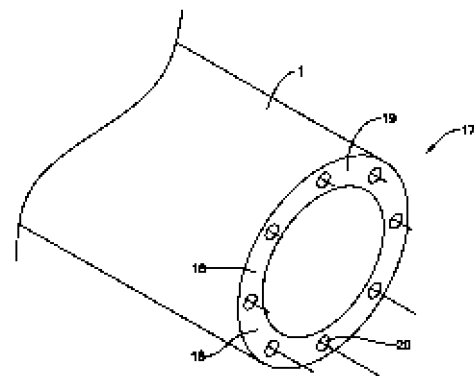


Figure 7B

The indicators are rods or wires running through the wall of the shaft. As the shaft is bent, as in Figure 7B, the wires on the concave side of the bend extend out further and the wires on the convex side are pulled in. Thus the magnitude and orientation of a bend is indicated by the indicators.

It is asserted in the final office action that Heckeles discloses these indicators in control wires 10 and 11, with Figures 2, 4 and 7 of Heckeles cited in support of this argument. However, these are partial views as is clear from Figures 2, 4 and 7 and from the description of the figures. For example, Figure 2 is described as “an enlarged partial view of the shaft.” Col. 3, l. 1. The control wires can be seen in these views because certain components of the device have been removed in the view to aid in the reader’s understanding of the overall device.

As appellants explain above, in the device of Heckeles, the control wires are not visible. This is illustrated in Figure 1, the only full view Heckeles provides. Because the control wires are not visible, they cannot be indicators as claimed. The assertion in the Office Action that “Heckeles discloses...a plurality of tube wall bending indicators at 10,11 locates [sic] at the catheter wall which is capable of becoming curved when the catheter is at a target site within the patient’s body, where the plurality of tube wall bending indicators is able to provide an indication of the tube wall bending relative to the anatomical reference” is contradicted by the teaching in Heckeles that the control wires 10,11 are concealed by other components of the device.

As such, appellants respectfully maintain that the invention of claim 1 is non-obvious over Heckeke in view of Kittrell when all words in the claim are properly considered.

Claims 3-4 and 22-23 were rejected as being unpatentable under 35 U.S.C. §103(a) over Heckeke in view of Kittrell and Bullister (USPN 6,171,253). Applicants respectfully traverse the rejection because the modification of Heckeke in view of Kittrell and Bullister has no reasonable chance of success.

Heckeke in view of Kittrell is cited for the reasons given above with respect to claim 1. Bullister is cited as "teaching a tube wall having a plurality of strain gauges." However, the strain gauge of Bullister is a pressure sensor mounted on a thin diaphragm of the tube. Such a strain gauge is cannot be used to provide an indication of tube wall bending in the tube of Heckeke. The strain gauge of Bullister is mounted on a single surface and is used to measure changes of the surface that correspond to changes in pressure in the main fluid channel. The tube of Heckeke is composed of discrete segments that move in relation to each other to make the tube as a whole bend, but which as individual segments are rigid. A strain gauge of Bullister mounted on a segment, therefore, will not become curved with the tube and will not provide an "indication of tube wall bending" as claimed nor will such as strain gauge "determine the dimensional different (sic) between the tube wall" as asserted on page 3 of the Final Office Action. A strain gauge of Bullister mounted across one of the joints between two of the segments will not work because it will break if mounted in such a fashion. Because the proposed modification will not function as asserted, there is no prima face case of obviousness over the cited references.

Claims 1-5, 22-31 and 33-34 were also rejected under 35 USC 112. It is not clear from the Advisory Action whether this rejection has been withdrawn because the Advisory Action is silent with respect to it. If this rejection has not been withdrawn, appellants respectfully traverse this rejection for the reasons discussed in the reply of January 20, 2009.

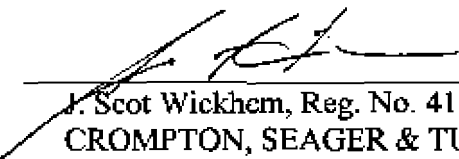
Reexamination and reconsideration are respectfully requested. It is respectfully submitted that all pending claims are now in condition for allowance. Issuance of a Notice of Allowance in due course is requested. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

Respectfully submitted,

TOBY FREYMAN et al.

By their Attorney,

Date: 4-20-2009

  
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